



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,857	12/08/2003	Andrew John Cardno		1227

37942 7590 01/11/2007  
COMPUDIGM SERVICES INC.  
1550 W. Horizon Ridge Parkway  
SUITE A  
Henderson, NV 89012

EXAMINER
----------

LEE, JINHEE J

ART UNIT	PAPER NUMBER
----------	--------------

2174

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/728,857

Applicant(s)

CARDNO, ANDREW JOHN

Examiner

Jinhee J. Lee

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Re claim 1-14, claim 1 and claim 8 claims a data structure, however, it appears the limitations of said claim are merely claiming statements defining various items, therefore said limitations do not appear to be defining any functional interrelations which permits the computer program's functionality (or data structure's functionality) to be realized.

In view of the above, claims 1-14 are therefore directed to non-statutory subject matter.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong (6343275).

Re claim 1, Wong discloses a data analysis system comprising: an interaction database maintained in computer memory, the interaction database comprising interaction data representing interactions between customers and merchants (see column 4 lines 27-35 for example); a spatial display component configured to display a graphical spatial representation of at least part of the commercial premises of a merchant (see figures 4 and 5 for example); a retrieval component configured to retrieve from the interaction database a plurality of data values representing interactions between customers and merchants (see column 4 lines 27-35 for example); a contour generator configured to generate and superimpose a representation of the data values on the spatial representation (see figure 113 for example); a user selection component configured to enable a user to select part of the spatial representation (see column 39 lines 10-16 for example); and a data display component configured to superimpose a representation of interactions between customers and merchants associated with the part of the spatial representation selected by the user (see figure 94 for example).

Re claim 2, Wong discloses a data analysis system wherein the merchant provides a plurality of products to customers, the spatial representation comprising representations of one or more of the products corresponding to the spatial position of the products within the commercial premises of the merchant (see figure 113 for example).

Re claim 3, Wong discloses a data analysis system wherein the user selection component is configured to enable a user to select a product in the spatial representation (see column 39 lines 10-16 for example).

Re claim 4, Wong discloses a data analysis system wherein the representation generated by the data display component is associated with the product selected by the user (see figure 113 and column 39 lines 5-10 for example).

Re claim 5, Wong discloses a data analysis system wherein the representation displays interactions between customers and merchants involving the product selected by the user (see column 39 lines 10-16 for example).

Re claim 6, Wong discloses a data analysis system wherein the contour generator is configured to generate and display a contoured representation of one or more of the data values centered on respective data points such that one or more of the data points is displayed as a local maximum (see figure 113 for example).

Re claim 7, Wong discloses a data analysis system wherein the contour generator is configured to generate and display data points corresponding to the data values on one or more contour lines around one or more of the data points, each contour line representing data values which are less than the data value of the data point around which the contour line is displayed (see figure 113 for example).

Re claim 8, Wong discloses a method of data analysis comprising the steps of: maintaining in computer memory an interaction database, the interaction database comprising interaction data representing interactions between customers and merchants (see column 4 lines 27-35 for example); displaying a graphical spatial representation of at least part of the commercial premises of a merchant (see figure 113 for example); retrieving from the interaction database a plurality of data values representing interactions between customers and merchants (see column 39 lines 10-

Art Unit: 2174

16 for example); generating and superimposing a representation of the data values on the spatial representation (see figure 94 for example); and superimposing a representation of interactions between customers and merchants associated with part of the spatial representation selected by a user (see column 3 lines 10-16 and figure 94 for example).

Re claim 9, Wong discloses a method in which the merchant provides a plurality of products to customers, the method further comprising the step of displaying representations of one or more of the products corresponding to the spatial position of the products within the commercial premises of the merchant (see figure 113 for example).

Re claim 10, Wong discloses a method further comprising the step of providing a user selection component to enable a user to select a product in the spatial representation (see column 39 lines 10-16 for example).

Re claim 11, Wong discloses a method further comprising the step of generating and displaying a representation associated with the product selected by the user (see figure 113 and column 39 lines 5-10 for example).

Re claim 12, Wong discloses a method further comprising the step of displaying a representation of interactions between customers and merchants involving the product selected by the user (see column 39 lines 10-16 for example).

Re claim 13, Wong discloses a method further comprising the step of generating and displaying a contoured representation of one or more of the data values centered

Art Unit: 2174

on respective data points, such that one or more of the data points is displayed as a local maximum (see figure 113 for example).

Re claim14, Wong discloses a method further comprising the step of generating and displaying data points corresponding to the data values and one or more contour lines around one or more of the data points, each contour line representing data values which are less than the data value of the data point around which the contour line is displayed (see figure 113 for example).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jinhee J. Lee whose telephone number is 571-272-1977. The examiner can normally be reached on M- F at 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-2100 ext. 74. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2174

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jinhee J Lee  
Primary Examiner  
Art Unit 2174

A handwritten signature in black ink, appearing to read 'Jinhee J Lee', with a long horizontal flourish extending to the right.

jil